

Notice of Allowability

Application No.

10/505,364

Applicant(s)

RIMONDI, RENATO

Examiner

Paul Durand

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8/3/2006.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s) .

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER COMMENT

1. Applicants' amendment to the specification is acknowledged. The objection to the specification has been withdrawn.
2. Applicants' amendment to claims 1,2,3,5 and 8 is acknowledged. The rejection of claims 1-10 under 35 U.S.C. § 112, 2nd paragraph has been withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen Weyer on 9/25/2006.

- a. Replaced claims 1-10, with attached claims 1-10.

Conclusion

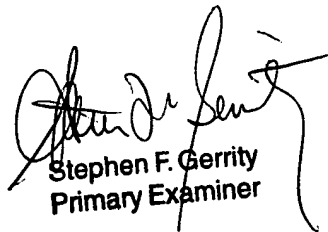
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Durand
September 25, 2006



Stephen F. Gerrity
Primary Examiner

1. A movable gripper for machines for the packaging of products with stretchable film, placed under a posterior folder having a pusher for the expulsion of the packaged product, disposed on a horizontal translation carriage, said movable gripper comprising:

a flat upper jaw, supported by a forked arm, said forked arm pivotally mounted upon a forked arm shaft, said forked arm shaft being horizontal and parallel to said carriage and rotatably supported by at least a pair of parallel supports interconnected to the median and lower portion of the carriage;

a lower jaw supported by a lower jaw arm, said lower jaw arm fixed on said forked arm shaft;

a first square lever with a lateral appendix disposed at an end of said forked arm shaft, said first square lever for the co-operation with a cam for the opening and closing operations of a first gripper;

an eccentric element keyed on a support shaft, parallel to the forked arm shaft, said eccentric element for maintaining the support shaft horizontally or for lowering the support shaft, said support shaft rotatably supported by one of the pair of parallel supports; and

a second square lever located at an end of the support shaft for co-operation with the cam which the second square lever contacts during movement of the carriage,

wherein said eccentric element cooperates with a portion of said upper jaw extending laterally away from said first gripper and a forked portion of the stem of the upper jaw to control oscillation of the first gripper around the forked shaft.

2. The gripper according to claim 1, wherein said eccentric element comprises a cylindrical and round section body having a hole, eccentrically positioned and parallel to a longitudinal axis of the eccentric element, and the support shaft, upon which the eccentric element is fixed, passing through the hole.

3. The gripper according to claim 1, wherein the eccentric element contacts a bar integral to a lateral portion of the fork arm, said fork arm supports in opposition to said bar and with the interposition of regulation eccentric means, a pin parallel to the support shaft with the eccentric element and upon which there is rotatably assembled a roller or bearing which co-operates by rolling friction with a lower portion of said eccentric element.

4. The gripper according to claim 3, wherein the bar which co-operates with the upper portion of an eccentric element, rotatably supports a roller or a co-operation means with rolling friction with the eccentric element.

5. The gripper according to claim 1, wherein the support shaft is rotatably supported at an end of the support shaft opposite said eccentric element, by means of an eccentric element support placed at the level of a side of the carriage to which said eccentric element support is fixed and on an end of the support shaft which is projecting from said eccentric element support, there is fixed said second square lever upwardly oriented and toward the first gripper, provided at the end with a roller,

wherein when said second square lever, in its rest position, is pushed by the action of an elastic means resting on a lower retainer integral with said eccentric element support, the eccentric element provides an eccentricity force downwardly oriented and the upper jaw of the first gripper is raised and in contact with the overhanging posterior folder.

6. The gripper according to claim 5, wherein the elastic means comprises a pre-loaded needle spring which is wound on a portion of said support shaft, said elastic means anchored on one end to a bush fixed on the support shaft and anchored with the other end to one of the pair of parallel supports of the carriage which rotatably carries the support shaft and the forked shaft of the first gripper.

7. The gripper according to claim 1, wherein during the translation of the carriage, moving close to a distributor of the film, an end roller of the second square lever moves to co-operate with a front of a fixed cam, upon which front the same roller progressively goes up raising said second square lever in a vertical position and then lowers while said second square lever continues in a backwards rotation, afterwards said roller co-operates with a beveled corner zone of said cam and finally runs along a horizontal lower side of the cam, while said second square lever remains backwardly oriented, in the condition in which the eccentric element is upwardly oriented with respect to the major eccentricity of said eccentric element and with the upper jaw and lower jaw downwardly oriented, in the correct position for the co-operation with a distributor of the film.

8. The gripper according to claim 1, wherein the forked arm shaft has projection portions, on respective ends, which extend from a small annular frame of one of the pair of parallel supports, and further comprising needle springs wound on said projecting portions and pre-loaded with a force, a first end of each said needle spring anchored to bushings fixed to said forked shaft, and a second end of said needle springs anchored to a terminal fork portion of the forked arm whereby the two jaws of the gripper are forced against each other by said springs.

9. The gripper according to claim 8, wherein the first square lever is provided at one end with a lateral roller parallel to said forked arm shaft and that during the translation of the carriage, when it is required that the upper jaw separates from the lower jaw, said lateral roller runs along the lower side of a third lever downwardly oriented, said third lever pivotal along an axis parallel to said forked arm shaft, a lower end of said third lever being provided with a lateral recess, an inter-pivotal point defined by a fourth lever projecting under the first lever with an extension portion acting as a trigger, placed in the path of said lateral roller and which projects upwardly from said fourth lever with a portion having the function of a hook, provided with a lateral appendix which, via an elastic element is pushed to engage a lateral recess of a small vertical and fixed guide and via elastic means to upwardly urge said third lever in such a manner that when said lateral roller co-operates with said third lever, the lower jaw of a first gripper is moved away from the upper jaw and when the first gripper has arrived opened and in a low position in co-operation with a distributor gripper of a distributor of the film, said lateral

roller co-operates with the extension portion of the fourth lever and causes the disengagement of the hook of this one by the recess, so that said third lever, is raised by the action of said elastic means and is stopped with the hook against an elastic bumper, while the lower jaw of the first gripper is raised and carries the head of the film retained by a comb of the distributor, to be fixed between the teeth of said lower jaw, and a strip of rubber of the upper jaw of the first gripper, means being provided to re-load in the downwardly inclined position said third lever with the function of the cam, as soon as said lateral roller has gone beyond said third lever during a displacement run of the first gripper from the distributor.

10. The gripper according to claim 9, wherein said third lever is disposed in a position which does not interfere with the lateral roller and with said first lever during the opening and closing movement of the first gripper, a short fifth lever arm is downwardly oriented and having a rounded end or provided with a roller, with which is co-operating a cam fixed to the carriage which provides re-loading of said fifth lever to function as a cam during the displacement run of the first gripper from the film distributor.